Claims

1. A switchable electrical interconnection arrangement comprising:

a busbar of greater than 30A current capacity mounted in an electrically insulating housing;

means for electrically connecting a feeder cable to the busbar within the housing;

at least one connecting means mounted in the housing for making electrical connection to a respective branch cable that is receivable within the housing; and

a switching arrangement mounted within the housing for selectively making electrical connection between the or each branch cable and the busbar, the switching arrangement comprising a switch moveable between an ON and an OFF position whereby a cam is rotatably driven so as to make and break electrical contact between an associated branch cable and the busbar.

2. Switchable electrical interconnection arrangement of greater than 30A current capacity comprising:

an electrically insulating housing having a first electrical conductor secured therein and an apertured chamber for receiving a second ("branch") electrical conductor;

wherein the chamber contains:

(a) a resiliently-biased support plate having an aperture that is alignable with the chamber aperture for receiving the second electrical conductor;

(b) an electrically-insulating cable holder having first and second interconnecting channels therein for receiving said first and second electrical conductors respectively, and being arranged to receive the support plate slidably mounted therewithin: and

(c) a switching member that is movable between ON and OFF positions in which electrical contact is made and broken respectively between the first and second electrical conductors;

wherein the support plate is movable by an external force from a first position, against its resilient biasing, so as to slide within the cable holder to a stop position therewith such that further movement causes both the support plate and the cable support to move within the insulating housing thereby substantially to bring into alignment the apertures of the support plate and the housing to permit introduction of the second electrical conductor into the second channel of the cable holder within the housing;

wherein removal of the external force allows the support plate to move back to a second position, under the action of the resilient biasing, thereby to retain the second conductor within the second channel of the cable support; and

wherein the switching member is movable between its OFF position in which the cable holder is retained spaced apart from the first electrical conductor, and its ON position in which the support plate and the cable holder are moved, under the restoring force of the resilient biasing, to a third position in which the second channel of the cable holder encompasses the second electrical conductor, thereby effecting electrical connection between the first and second electrical conductors.

3. An arrangement according to claim 2, wherein the cable holder and the switching member

(a) are mounted on a common support shaft, about which the switching member is rotatable, and

(b) interengage with one another by a cam arrangement, thereby to make and break electrical contact between the first and second electrical conductors.

4. An arrangement according to claim 3, wherein the cam arrangement comprises a cam that is mounted externally on the switching member and that engages within an aperture of the cable holder.

5. An arrangement according to any one of claims 2 to 4 comprising a plurality of said chambers.

6. An arrangement according to any one of claims 2 to 5, comprising a plurality of first electrical conductors and wherein each cable holder comprises a corresponding plurality of second channels.

7. An arrangement according to any one of claims 2 to 6, comprising means for connecting an electrical power supply cable to the or each first electrical conductor.

8. An arrangement according to any one of claims 2 to 7, wherein the or each first electrical conductor comprises an elongate busbar.

9. An arrangement according to any preceding claim which in operation exerts a clamping force of at least 10KGf, preferably 15 to 40 Kgf, on the branch cable conductor.

10. A switchable electrical interconnection arrangement substantially as hereinbefore described with reference to the accompanying drawings.